

CLAIMS

1. A traveling transmission for a working vehicle, comprising an auxiliary transmission having at least two speed stages, which is interposed
5 between a main clutch and a multi-speed-stage mechanical transmission, characterized in that:

said auxiliary transmission is configured such that power transmission is cut out interlockingly with the disengagement operation of said main clutch.

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2. A traveling transmission according to claim 1, characterized in that:

said mechanical transmission is of a gear continuously engaging type provided with a synchronous clutch.

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3. A traveling transmission according to claim 1 or 2, characterized in that:

said auxiliary transmission is configured as a high-low speed selector device for obtaining the two speed stages, including a hydraulic-
20 operated first hydraulic clutch and a spring-operated second hydraulic clutch; and

said auxiliary transmission is such configured as to be drained operating oil from said first hydraulic clutch and, also, to be supplied the operating oil to said second hydraulic clutch, thereby cutting out said power
25 transmission.

4. A traveling transmission according to claim 1 or 2, characterized in that:

said auxiliary transmission is configured as a high-low speed
5 selector device including a hydraulic-operated first hydraulic clutch, a
spring-operated second hydraulic clutch and a direction switching valve for
supplying/discharging operating oil to/from the first and second hydraulic
clutches; and

said direction switching valve is such configured as to be drained the
10 operating oil from said first hydraulic clutch and, also, to be supplied the
operating oil to said second hydraulic clutch, interlockingly with the
disengagement operation of said main clutch.

5. A traveling transmission according to claim 3 or 4, further
15 comprising an operating member for disengaging said main clutch, and a
controller for controlling said direction switching valve, characterized in
that:

said controller is such configured as to move said direction switching
valve to a position at which the operating oil is drained from said first
20 hydraulic clutch and, also, the operating oil is supplied to said second
hydraulic clutch, interlockingly with the operation of said operating member.

6. A traveling transmission according to any one of claims 1 to 5,
further comprising an operating member for operating said main clutch,
25 characterized in that:

said auxiliary transmission is configured such that the power transmission is cut out after said main clutch is completely disengaged during the disengagement operation of the main clutch and, also, the power transmission is restored before said main clutch starts the power
5 transmission during the engagement operation of the main clutch.

7. A traveling transmission according to claim 6, characterized in that:

the power transmission is performed or is cut out in said auxiliary
10 transmission based on the operating quantity of the operating member for engaging or disengaging said main clutch.